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A NEW AUSTRALIAN LIZARD
WITH A NOTE ON HEMIERGIS

BY HOBART M. SMITH[1]

In identifying a small collection of reptiles from Western Australia, purchased by Field Museum from Mr. Joseph Baldwin in 1930, I find five specimens of a new scincid lizard of the genus *Egernia*, and 11 specimens which constitute the second record of the inadequately described *Hemiergis initiale* Werner. The new *Egernia* belongs to the *striolata* group, hitherto unknown from Western Australia. I am indebted to Mr. Karl P. Schmidt for assistance in studying this Australian material, and have discussed the new species and the *Hemiergis* problem with him. We are indebted to Mr. Albert A. Enzenbacher for the pencil sketches which illustrate the new species.

Egernia carinata sp. nov.

Type from Toolbrunup,[2] Western Australia. No. 11729 Field Museum of Natural History. Collected October 30, 1930, by Joseph Baldwin.

Diagnosis.—Dorsal scales tri-, quadri- and quinquecarinate, the keels rather weak, but plainly visible; 30 scales around middle of body; frontal broader and somewhat larger than interparietal; tail shorter than body or but little longer, pluricarinate, not spinose; two mid-dorsal rows of scales on basal third or half of tail; no distinct or indistinct dorsolateral light stripe; dorsal spots considerably more than half the width of a scale.

Description of type.—Head somewhat flattened; interparietal narrow, twice as long as broad, as long as frontal, not enclosed by parietals; two frontoparietals; width of frontal two-thirds its length; prefrontals in contact medially; frontonasal narrowly in contact

[1] Walter Rathbone Bacon Scholar, Smithsonian Institution.

[2] Probably near Tambellup, Southwest Division.

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with rostral; four supraoculars, the second largest; frontal in contact with first two; six or seven superciliaries; lower eyelid scaly; no supranasals; a curving suture behind nostril, completely separating a postnasal on one side, terminating blindly on the other; two subequal loreals; two preoculars, the posterior less than half the size of the anterior; seven supralabials, the fifth and sixth entering the orbit; seven infralabials.

Dorsal scales on body and limbs tri-, quadri- and quinquecarinate; three pairs of pluricarinate nuchals; ear with two or three lobules; 20 or 21 lamellae under fourth toe; dorsal caudal scales pluricarinate; two mid-dorsal rows of scales on basal third of tail, replaced by a single row distad; midventral subcaudal row enlarged; tail very slightly compressed distally.

General dorsal ground color olive gray; a poorly defined, irregular black stripe extending from temporal region through upper part of ear, above arm to sides of body, there becoming indistinguishable by breaking up into small, black spots; a few scattered dark spots lower on sides of body; dorsal surface with rather indefinite rows of quadrangular spots, one on each scale row; spots in adjacent rows tending to alternate; usually a scale with a dark spot followed by an unmarked scale, then by a scale with a spot; each spot two-thirds to three-fourths the width of a scale; a few scattered spots on basal half of tail. Labia white, the scales dark-edged.

Throat and sides of belly bluish gray, the former provided with irregular flecks of darker color sometimes arranged in longitudinal series; middle of belly, posterior of limbs, and midventral surface of tail cream.

Measurements.—Snout to foreleg 33.5; foreleg 25; hind leg 34.5; snout to vent 91.5; tail 87.5; total length 179.

Notes on paratypes.—Four specimens, Nos. 11345–6 and 11730–1, with the same data as the type. Internasals narrowly in contact in one; superciliaries 6–6 in two, 6–7 in one, 7–7 in one; the partial separation of a postnasal by a curving suture, which does not reach the upper border of the nasal, appears to be the normal condition; postnasal completely separated from nasal on one side in three; seven supralabials on one side in one, supralabials otherwise eight; the sixth and seventh supralabial entering the orbit; two nuchals on one side in one, four on one side in another; auricular lobules two to four; if more than two lobules, two are much larger than others; lamellae on fourth toe 20 to 22; basal half of tail with two mid-dorsal rows of scales in two specimens.

The body and tail measurements respectively of two specimens with complete tails are: 82, 89; 91, 85.

Remarks.—The species is obviously most closely related to *striolata*, the only other *Egernia* with quinquecarinate dorsals and the tail pluricarinate and not spinose. From *striolata* the present species differs in having the frontal broader and larger than the interparietal, the posterior preocular considerably smaller than the anterior, and the two mid-dorsal series of caudal scales extending one-third the length of the tail or more (only one-fifth or one-sixth in *striolata*); in

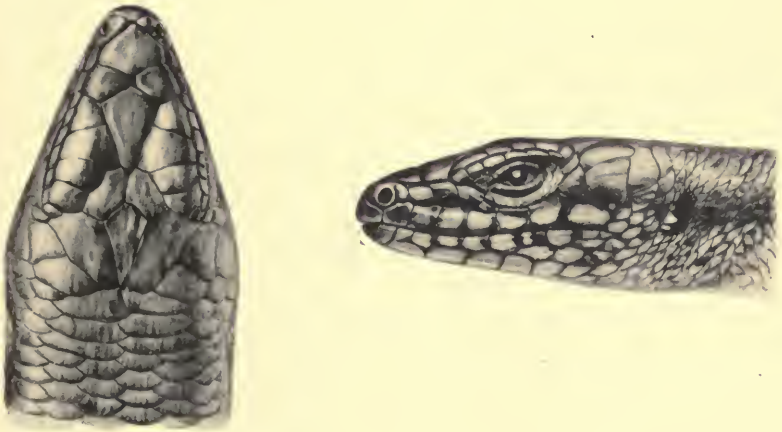

FIG. 3. Dorsal and lateral views of head of *Egernia carinata*, type, × 2.

coloration it differs by lacking a dorsolateral light line (evident in *striolata* at least on the neck) and by lacking a distinct linear arrangement of narrow, dark spots on the dorsum (in *striolata* the dorsal dark spots are narrow, occupying a third the width of a scale, and are arranged in linear series, sometimes fused). It is possible that there is an average difference in tail length, for of three specimens of *carinata* two have the tail shorter than the body, while the tail is longer than the body in three specimens of *striolata*. It is further noteworthy that *striolata* has been collected only in Queensland.

Hemiergis initiale Werner.

Hemiergis initiale Werner, Fauna Südwest-Australiens, 2, p. 480, 1910—Lion Mill and Jarrahdale.

Eleven specimens in the same collection and from the same locality as the new *Egernia* represent *Hemiergis initiale* Werner, a species apparently known previously only from the type series. It was

tentatively considered by Loveridge (Bull. Mus. Comp. Zool., 77, p. 369, 1934) to be a synonym of *Siaphos maccoyi* Lucas and Frost. This action was no doubt prompted by the rather inadequate description of *initiale*.

In these specimens, the scale rows at the middle of the body are 20 in all, the prefrontals are well developed, the tympanum is indistinct, and the digits number five. Two indistinct series of minute spots occur on the back, one on each side of the mid-dorsal line. The sides of the body are dark gray, the color abruptly differentiated dorsolaterally from the brown dorsal color. The throat and subcaudal scales, and usually the belly scales, are dark-edged. The general tone of the subcaudal surface is much darker than that of the ventral body surface.

The distinctness of *initiale* from *maccoyi* is very clear; most pronounced is the presence of prefrontals in the former, and their absence in *Siaphos maccoyi*. It appears, moreover, that this difference is the essential generic distinction between *Siaphos* and *Hemiergis;* the number of toes does not seem a very important character, since one species (*equalis*) of the former genus has three fingers and the others five, while species of the latter genus may have two, three, four, or five. All the species of *Siaphos* lack distinct prefrontals, while all *Hemiergis* have distinct prefrontals. Loveridge's (loc. cit.) comparisons of *Siaphos equalis* and *Hemiergis decresiense* (three-fingered species) did not take into account this generic distinction, evident of course in these two species. Were the differences as slight as he states, *Hemiergis* and *Siaphos* could hardly be retained as distinct genera.

Since, however, this difference in character of the prefrontals does exist, and since, as Werner (loc. cit.) pointed out, *initiale* forms an integral part of the orthogenetic series in the evolution of *Hemiergis* toward the ultimate, most highly modified two-fingered species (*quadrilineatum*), I believe *initiale* should be retained in the genus *Hemiergis*.

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